Test Report
Gradation test

Project Name	1. Improvement of roads and drain at kogilu layout main road and cross road in ward no 05 byatarayanapura sub division 2. Improvement of roads and drain at kattigenahalli kuvempunagara cross road in ward no 05 byatarayanapura sub division 3. Improvement of drain at dwarakanagara srirama temple road in ward no 05 byatarayanapura sub division 4. Improvement of roads and drain at kattigenahalli surrounding area in ward no 05 byatarayanapura sub division 5. Improvement of roads and drain at nirantara layout in ward no 05 byatarayanapura sub division 6. Improvement of drain and asphalting to road at agrahara layout harihara temple surrounding area in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2017-2018/QR/P-8/1
Mix Type	Plain cement concrete
Contractor	Sri A Chennareddy
Test Method	IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	At site
Material	Fine Aggregates
Sample No	1
Date	20-Apr-2018

Weight of Sample(gram): 200

Sl No.	IS Sieve Size	Weight retained	% retained	Cumulative % of Passing: % Cumulative	% Passing	Gradation limits	Remarks
1	10 mm	0	0.00	0.00	100.00	100	Gradation satisfies the MORT&H Zone II Specification for PQC
2	4.75 mm	14	7.00	7.00	93.00	90-100	
3	2.36 mm	18	9.00	16.00	84.00	75-100	
4	1.18 mm	13	6.50	22.50	77.50	55-90	
5	600 µ	45	22.50	45.00	55.00	35-59	
6	300 µ	58	29.00	74.00	26.00	8-30	
7	150 µ	42	21.00	95.00	5.00	0-10	

Note:

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iv. Any query regarding the report must be reported immediately.

Mecadez Core Technologies Pvt Ltd

Authorised Signature

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Test Report
Gradation test

Project Name
1. Improvement of roads and drain at kogilu layout main road and cross road in ward no 05 byatarayanapura sub division
2. Improvement of roads and drain at kattigenahalli kuvempunagara cross road in ward no 05 byatarayanapura sub division
3. Improvement of drain at dwarakanagara srirama temple road in ward no 05 byatarayanapura sub division
4. Improvement of roads and drain at kattigenahalli surrounding area in ward no 05 byatarayanapura sub division
5. Improvement of roads and drain at nirantara layout in ward no 05 byatarayanapura sub division
6. Improvement of drain and asphalting to road at agrahara layout harihara temple surrounding area in ward no 05 byatarayanapura sub division

Client Executive Engineer Project Division Yelahanka Zone
Job No MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2017-2018/QR/P-8/1
Mix Type Plain cement concrete
Contractor Sri A Chennareddy
Test Method IS : 2386 (Part - 1) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location At site
Material Coarse aggregates
Sample No 1
Date 20-Apr-2018

Weight of Sample: 4000 gms

Sl. No	I.S. Sieve size	Weight Retained (gm)	Percentage of weight Retained (%)	Percentage of weight retained (%)	Passing		Remarks
					Test Result	Gradation Limits as per	
1	31.50	0	0.00	0.00	100.00	100	
2	26.50	492	12.30	12.30	87.70	85-95	
3	19.00	320	8.00	20.30	79.70	68-88	
4	9.50	635	15.88	36.18	63.83	45-65	
5	4.75	420	10.50	46.68	53.33	30-55	
6	0.60	950	23.75	70.43	29.58	8-30	
7	0.15	850	21.25	91.68	8.33	5-15	
8	0.08	250	6.25	97.93	2.08	0-5	

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Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

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Test Report
Water absorption test

Project Name

1. Improvement of roads and drain at kogilu layout main road and cross road in ward no 05 byatarayanapura sub division
2. Improvement of roads and drain at kattigenahalli kuvempunagara cross road in ward no 05 byatarayanapura sub division
3. Improvement of drain at dwarakanagara srirama temple road in ward no 05 byatarayanapura sub division
4. Improvement of roads and drain at kattigenahalli surrounding area in ward no 05 byatarayanapura sub division
5. Improvement of roads and drain at nirantara layout in ward no 05 byatarayanapura sub division
6. Improvement of drain and asphalting to road at agrahara layout harihara temple surrounding area in ward no 05 byatarayanapura sub division

Client Executive Engineer Project Division Yelahanka Zone
Job No MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2017-2018/QR/P-8/1
Mix Type Plain cement concrete
Contractor Sri A Chennareddy
Test Method IS : 2386 (Part - 3) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location At site
Material Coarse aggregates
Sample No 1
Date 18-Apr-2018

Sl. No.	Particulars	Computations	Test Numbers Test 1	Test 2	Mean
1	Weight of SSD sample	W_1 g	761	763	
2	Aggregates Immersed in	W_2g	2024	2022	
3	Weight of Saturated Aggregate in water	$W_s g = W_2 - W_1$	1263	1259	
4	dry aggregate in Air	W_3 g	2059	2047	
5	Volume of the Aggregate	$W_3 - W_s$	796	788	
6	Aggregate	W_4g	2020	2018	
7	Specific Gravity	$W_4/(W_3 - W_s)$	2.54	2.56	2.55
8	Apparent Specific Gravity	$W_4/(W_4 - W_s)$	2.67	2.66	2.66
9	Water Absorption	$(W_4 - W_3)*100/W_4$	1.93	1.44	1.69

Comments: Maximum allowable Aggregate Water Absorption value is 2.0%.

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Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Test Report
Impact test

Project Name

1. Improvement of roads and drain at kogilu layout main road and cross road in ward no 05 byatarayanapura sub division
2. Improvement of roads and drain at kattigenahalli kuvempunagara cross road in ward no 05 byatarayanapura sub division
3. Improvement of drain at dwarakanagara srirama temple road in ward no 05 byatarayanapura sub division
4. Improvement of roads and drain at kattigenahalli surrounding area in ward no 05 byatarayanapura sub division
5. Improvement of roads and drain at nirantara layout in ward no 05 byatarayanapura sub division
6. Improvement of drain and asphalting to road at agrahara layout harihara temple surrounding area in ward no 05 byatarayanapura sub division

Client Executive Engineer Project Division Yelahanka Zone
Job No MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2017
Mix Type Plain cement concrete
Contractor Sri A Chennareddy
Test Method IS : 2386 (Part - 4) 1963 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location At Site
Material Coarse aggregates
Sample No 1
Date 18-Apr-2018

Sl. No.	Determination	Unit	Trails	
1	Weight of empty cylinder, w1	gm	960	960
2	Weight of container filled with Aggregate, w2	gm	1304	1306
3	Weight of the Aggregate before compaction, (w2 - w1) = w3	gm	344	346
4	Weight of the sample passing through 2.36 mm IS sieves after Impact, w4	gm	80	81
5	Weight of the sample retained on 2.36 mm IS sieve after Impact, w5	gm	264	265
6	Aggregate Impact Value (w4 / w3)x100	%	23.26	23.41
7	Specified Limit	%	45.00	

Results: Average Aggregate Impact Value: **23.33** %

Note:

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Asst. Executive Engineer
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Yelahanka Zone
Bangalore

Test Report
Workability

Project Name	1. Improvement of roads and drain at kogilu layout main road and cross road in ward no 05 byatarayanapura sub division 2. Improvement of roads and drain at kattigenahalli kuvempunagara cross road in ward no 05 byatarayanapura sub division 3. Improvement of drain at dwarakanagara srirama temple road in ward no 05 byatarayanapura sub division 4. Improvement of roads and drain at kattigenahalli surrounding area in ward no 05 byatarayanapura sub division 5. Improvement of roads and drain at nirantara layout in ward no 05 byatarayanapura sub division 6. Improvement of drain and asphalting to road at agrahara layout harihara temple surrounding area in ward no 05 byatarayanapura sub division
Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2017-2018/QR/P-8/1
Mix Type	Pavement Quality Concrete
Contractor	Sri A Chennareddy
Test Method	IS : 4031 (Part 5) -1988 & Specification for Road & Bridge Works, MORT&H, Rev-V.
Location	At site
Material	Concrete
Sample No	1
Date	23-Apr-2018

Sl. No.	Determination	Trial 1	Trial 2
1	Bottom Diameter(cm)	20	20
2	Top Diameter(cm)	10	10
3	Height(cm)	30	30
4	Slump(mm)	29	27
5	Average	28	

Comments: Maximum allowable slump as per MORT&H is 25±15mm

Note:

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For Mecadez Core Technologies Private Limited

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Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Test Report
Concrete Compresive strength

Project Name
1. Improvement of roads and drain at kogilu layout main road and cross road in ward no 05 byatarayanapura sub division
2. Improvement of roads and drain at kattigenahalli kuvempunagara cross road in ward no 05 byatarayanapura sub division
3. Improvement of drain at dwarakanagara sriram temple road in ward no 05 byatarayanapura sub division
4. Improvement of roads and drain at kattigenahalli surrounding area in ward no 05 byatarayanapura sub division
5. Improvement of roads and drain at nirantara layout in ward no 05 byatarayanapura sub division
6. Improvement of drain and asphalting to road at agrahara layout harihara temple surrounding area in ward no 05 byatarayanapura sub division

Client Executive Engineer Project Division Yelahanka Zone
Job No MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2017-2018/QR/P-8/1
Mix Type Pavement Quality Concrete
Contractor Sri A Chennareddy
Test Method IS:- 4031 (part 6) 1988 & Specification for Road & Bridge Works, MORT&H, Rev V
Location Bay
Material concrete
Sample No 1
Date 17-Apr-2018

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength
1	30	7	7.49	0	2219.26	500	0.0225	22.22	22.71	23.14
2	30	7	7.53	0	2231.11	512	0.0225	22.76		
3	30	7	7.39	0	2189.33	521	0.0225	23.16		
4	30	7	7.71	0	2284.44	535	0.0225	23.78	23.57	
5	30	7	7.52	0	2228.15	529	0.0225	23.51		
6	30	7	7.49	0	2219.56	527	0.0225	23.42		

Results: 7-days Compressive strength of cement is 23.14 N/mm2

Note:
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Asst. Executive Engineer
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Yelahanka Zone
Bangalore

Test Report
Concrete Compresive strength

Project Name

1. Improvement of roads and drain at kogilu layout main road and cross road in ward no 05 byatarayanapura sub division
2. improvement of roads and drain at kattigenahalli kuvempunagara cross road in ward no 05 byatarayanapura sub division
3. Improvement of drain at dwarakanagara srirama temple road in ward no 05 byatarayanapura sub division
4. improvement of roads and drain at kattigenahalli surrounding area in ward no 05 byatarayanapura sub division
5. improvement of roads and drain at nirantara layout in ward no 05 byatarayanapura sub division
6. Improvement of drain and asphalting to road at agrahara layout harihara temple surrounding area in ward no 05 byatarayanapura sub division

Client Executive Engineer Project Division Yelahanka Zone
Job No MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2017-2018/QR/P-8/1
Mix Type Pavement Quality Concrete
Contractor M/s Chennareddy
Test Method IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location Bay
Material concrete
Sample No 2
Date 17-Apr-2018

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength
1	30	7	7.59	0	2248.89	502	0.0225	22.31	22.80	23.23
2	30	7	7.63	0	2260.74	514	0.0225	22.84		
3	30	7	7.49	0	2218.96	523	0.0225	23.24		
4	30	7	7.81	0	2314.07	537	0.0225	23.87	23.66	
5	30	7	7.62	0	2257.78	531	0.0225	23.60		
6	30	7	7.59	0	2249.19	529	0.0225	23.51		

Results: 7 days Compressive strength of cement is 23.23 N/mm2

Note:

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Yelahanka Zone
Bangalore

Test Report
Concrete Compresive strength

Project Name

1. Improvement of roads and drain at kogilu layout main road and cross road in ward no 05 byatarayanapura sub division
2. Improvement of roads and drain at kattigenahalli kuvempunagara cross road in ward no 05 byatarayanapura sub division
3. Improvement of drain at dwarakanagara sriram temple road in ward no 05 byatarayanapura sub division
4. Improvement of roads and drain at kattigenahalli surrounding area in ward no 05 byatarayanapura sub division
5. Improvement of roads and drain at nirantara layout in ward no 05 byatarayanapura sub division
6. Improvement of drain and asphalting to road at agrahara layout harihara temple surrounding area in ward no 05 byatarayanapura sub division

Client Executive Engineer Project Division Yelahanka Zone
Job No MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2017-2018/QR/P-8/3
Mix Type Pavement Quality Concrete
Contractor Sri A Chennareddy
Test Method IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev V
Location Hgy
Material concrete
Sample No 3
Date 17-Apr-2018

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength
1	30	7	7.68	0	2275.56	504	0.0225	22.40	22.89	23.32
2	30	7	7.72	0	2287.41	516	0.0225	22.93		
3	30	7	7.58	0	2245.63	525	0.0225	23.33		
4	30	7	7.90	0	2340.74	539	0.0225	23.96	23.75	
5	30	7	7.71	0	2284.44	533	0.0225	23.69		
6	30	7	7.68	0	2275.85	531	0.0225	23.60		

Results: 7-days Compressive strength of cement is 23.32 N/mm2

Note:

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For Mecadez Core Technologies Private Limited

Authorised Signature

Asst. Executive Engineer
Project Division
Yelahanka Zone
Bangalore

Test Report
Concrete Compresive strength

Project Name

1. Improvement of roads and drain at kogilu layout main road and cross road in ward no 05 byatarayanapura sub division
2. Improvement of roads and drain at kattigenahalli kuvempunagara cross road in ward no 05 byatarayanapura sub division
3. Improvement of drain at dwarakanagara srirama temple road in ward no 05 byatarayanapura sub division
4. Improvement of roads and drain at kattigenahalli surrounding area in ward no 05 byatarayanapura sub division
5. Improvement of roads and drain at nirantara layout in ward no 05 byatarayanapura sub division
6. Improvement of drain and asphalting to road at agrahara layout harihara temple surrounding area in ward no 05 byatarayanapura sub division

Client	Executive Engineer Project Division Yelahanka Zone
Job No	MCTPL/BBMP/Project Division Yelahanka Zone /PMC/2017-2018/QR/P-8/1
Mix Type	Pavement Quality Concrete
Contractor	Sri A Chennareddy
Test Method	IS : 4031 (part 6)-1988 & Specification for Road & Bridge Works, MORT&H, Rev. V.
Location	Bay
Material	concrete
Sample No	4
Date	17-Apr-2018

Cube	Concrete Grade	Age at Test (Days)	Weight (kg)	Dimension (LxWxH)	Density (kg/m^3)	Max. Load (KN)	Area (m^2)	Compressive Strength (N/mm^2)	Avg. Sample Strength	Avg. Strength
1	30	7	7.78	0	2305.19	506	0.0225	22.49	22.98	23.41
2	30	7	7.82	0	2317.04	518	0.0225	23.02		
3	30	7	7.68	0	2275.26	527	0.0225	23.42		
4	30	7	8.00	0	2370.37	541	0.0225	24.04	23.84	
5	30	7	7.81	0	2314.07	535	0.0225	23.78		
6	30	7	7.78	0	2305.48	533	0.0225	23.69		

Results: 7-days Compressive strength of cement is 23.41 N/mm2

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